

**What is Claimed is:**

1. An oximetry sensor comprising:
  - a wrap member having a cloth cover, the wrap member including a body member having a plurality of apertures therein, and an adhesive member disposed on the body member surrounding the plurality of apertures;
  - a release liner configured for removal from the adhesive member in at least one release liner portion;
  - an LED assembly secured in a first of the plurality of apertures in the wrap member; and
  - a photodiode secured in a second of the plurality of apertures in the wrap member.
2. The oximetry sensor of claim 1, wherein the body member comprises a compliant portion and a cloth fabric portion.
3. The oximetry sensor of claim 1, further comprising a fastener coupled to the body member for securing the wrap member to a patient, wherein the fastener is a hook and loop fastening system.
4. The oximetry sensor of claim 1, wherein the adhesive member is adhesively secured to the body member, and wherein the adhesive member includes at least one of an appliqué removably coupled therewith and another member coupled therewith.
5. The oximetry sensor of claim 1, wherein the adhesive member is an annular shaped member or an elongated shaped member.

6. The oximetry sensor of claim 1, wherein the release liner includes at least one of an appliqué adhesively coupled therewith and an other member adhesively coupled therewith.

7. The oximetry sensor of claim 1, wherein the adhesive member comprises a single-sided adhesively coated member, a double-sided adhesively coated member, or a member of silicone elastomer.

8. The oximetry sensor of claim 1, wherein the wrap member includes at least one cover located on at least a portion of each side of the body member.

9. An oximetry sensor comprising:

(a) a wrap member comprising:

(1) a body member having a plurality of apertures defined therein,

(2) a fastener coupled to the body member and adapted to secure the body member to at patient, and

(3) an adhesive member secured to the body member;

(b) a release liner configured for removal from the adhesive member in at least one release liner portion;

(c) an LED assembly adapted to be coupled to the wrap member; and

(d) a photodiode adapted to be coupled to the wrap member.

10. The oximetry sensor of claim 9, wherein the adhesive member secured to the wrap member is adhesively secured thereto.

11. The oximetry sensor of claim 9, further comprising an appliqué removably adhesively coupled to the release liner.

12. The oximetry sensor of claim 9, wherein the adhesive member secured to the wrap member is an annular shaped member or is elongated in shape.

13. The oximetry sensor of claim 9, wherein the adhesive member is a double-sided adhesively coated member.

14. The oximetry sensor of claim 9, wherein the body member comprises a fabric substrate, a foam substrate, or a combination thereof.

15. The oximetry sensor of claim 9, wherein the body member comprises a compliant substrate covered by a cloth member.

16. The oximetry sensor of claim 9, further comprising a cable operably coupled with the LED assembly and the photodiode.

17. The oximetry sensor of claim 9, wherein the fastener is a hook and loop fastener.

18. The oximetry sensor of claim 16, wherein the cable includes a connector on one end thereof.

19. The oximetry sensor of claim 9, wherein the LED assembly and the photodiode each include a housing therefor, each housing including an integral upper flange and an integral lower flange therefore.

20. The oximetry sensor of claim 19, wherein each the housing includes a cover therefore, the cover being transparent to infrared light.

21. The oximetry sensor of claim 9, wherein the wrap member is disposable and is supplied as a roll of disposable wrap members.

22. A disposable wrap member comprising:  
a body portion having a plurality of apertures therein;  
an adhesive member secured to the wrap member; and  
a release liner overlying the adhesive member, wherein the release liner is configured for removal from the adhesive member in at least one release liner portion.

23. The wrap member of claim 22, further comprising an appliqué removably coupled to the adhesive member or to the release liner.

24. The wrap member of claim 22, wherein the adhesive member is adhesively secured to the body member.

25. The wrap member of claim 22, wherein the adhesive member is an annular shaped member or an elongated shaped member.

26. The wrap member of claim 22, wherein the adhesive member is a double-sided adhesively coated member.

27. The wrap member of claim 22, wherein the body member comprises a foam substrate.

28. The wrap member of claim 22, wherein the body member comprises a compliant substrate covered by a cloth member.

29. The wrap member of claim 22, further comprising at least one other wrap member connected to the wrap member having perforations located therebetween.

30. The wrap member of claim 22, wherein the wrap member is provided as a roll of wrap members, each wrap member connected to an adjacent wrap member and having perforations located therebetween.

31. The wrap member of claim 22, wherein the body member comprises a foam portion and a fabric portion.

32. The wrap member of claim 22, further comprising a fastener coupled to the body member, wherein the fastener is a hook and loop fastener.

33. The wrap member of claim 22, wherein the body member has a butterfly shape or an elongated strip shape.

34. A method applying an oximetry sensor to a patient, comprising:

- 1) providing an LED assembly having a housing, the LED housing including two flanges thereon;
- 2) providing a photodiode having a housing, the photodiode housing including two flanges thereon;
- 3) providing a wrap member comprising:
  - a) a body member having a plurality of apertures defined therein,
  - b) an adhesive member secured to the body member, and
  - c) a removable liner overlying the adhesive member, wherein the removable liner includes at least one separately removable release liner portions;
- 4) inserting the photodiode and the LED assembly in the plurality of apertures;
- 5) removing a first one of the plurality of release liner portions; and
- 6) removing a second one of the plurality of release liner portions after removing the first one of at least one of release liner portion.

35. The method of claim 34, further comprising operably coupling a portion of a cable with the photodiode, and operably coupling a portion of a cable with the LED assembly.

36. The method of claim 35, further comprising applying the oximetry sensor to a surface of a patient such that the adhesive member secures the wrap member to such a patient.

37. A wrap member dispensing system comprising:  
a plurality of wrap members, each having a plurality of apertures therein, each wrap member including a fastener for securing the wrap member to a patient, and means for selectively detaching adjacent wrap member to one another.

38. The system of claim 37, wherein the means for selectively detaching adjacent wrap members from one another includes perforations defined in a portion of the wrap member.

39. The system of claim 37, wherein the fastener comprises at least one of an adhesive and a hook and loop fastener.

40. The system of claim 37, wherein the plurality of wrap members are provided as a roll of wrap members.

41. The system of claim 37, further comprising a spool around which the roll of wrap members is wound.